



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:49

Reporting for the week ending 12/07/19 (MMWR Week #49)

December 13th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

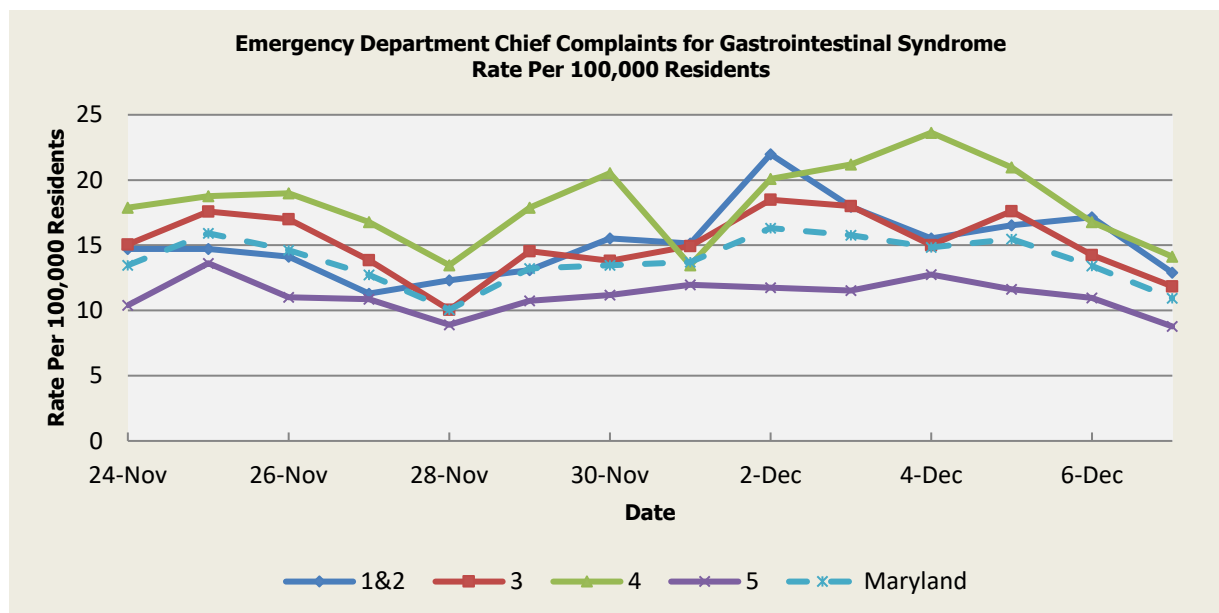
National:	No Active Alerts
Maryland:	Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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Gastrointestinal Syndrome



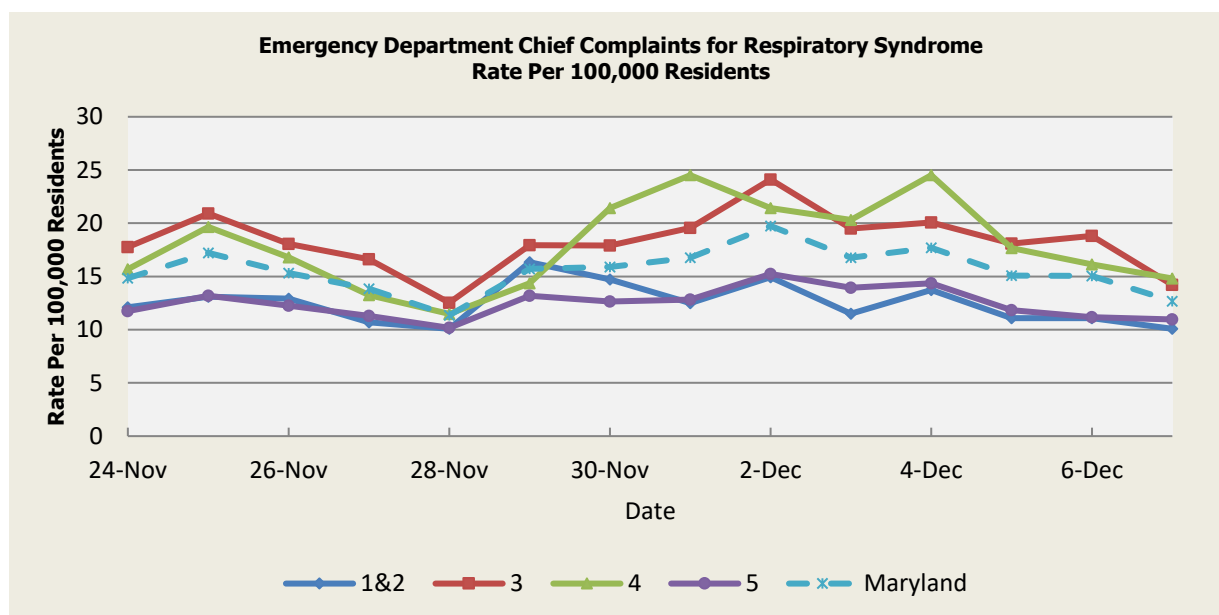
There were two (2) Gastrointestinal Syndrome outbreaks reported this week, one (1) outbreak of Gastroenteritis in a Nursing Home (Region 1&2), one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 4).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.33	15.08	15.96	10.27	13.16
Median Rate*	13.21	14.87	15.46	10.17	13.03

* Per 100,000 Residents

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Respiratory Syndrome



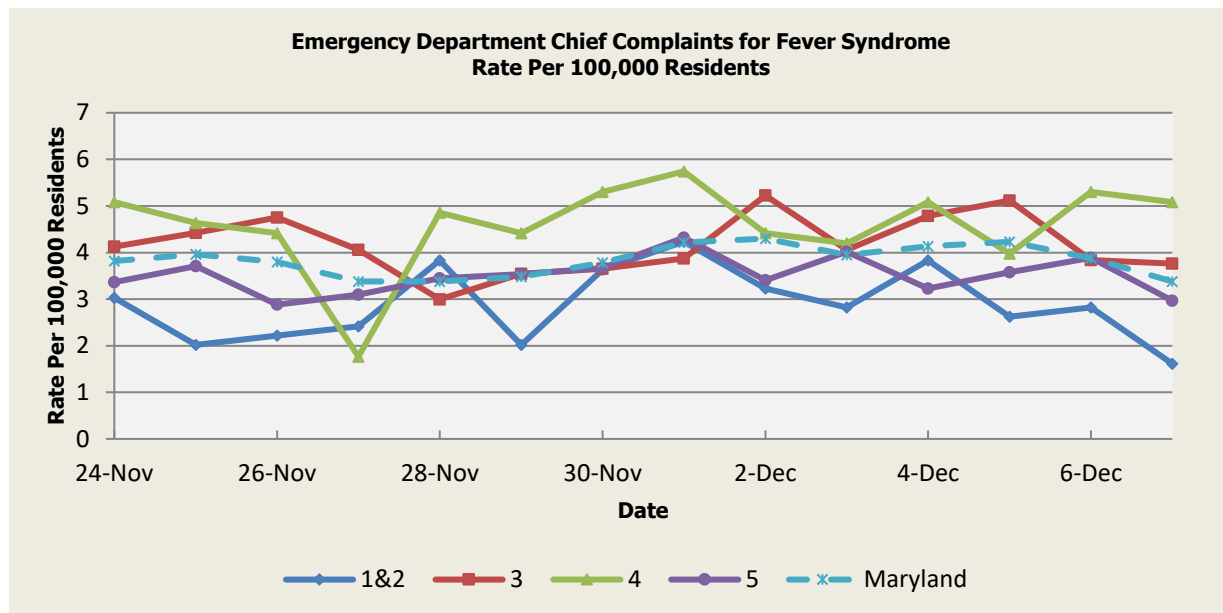
There were two (2) Respiratory Syndrome outbreak reported this week, one (1) outbreak of ILI in a Hospital (Region 4), one (1) outbreak of Legionellosis in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.63	14.74	15.08	9.96	12.76
Median Rate*	12.10	14.21	14.35	9.65	12.28

* Per 100,000 Residents

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Fever Syndrome



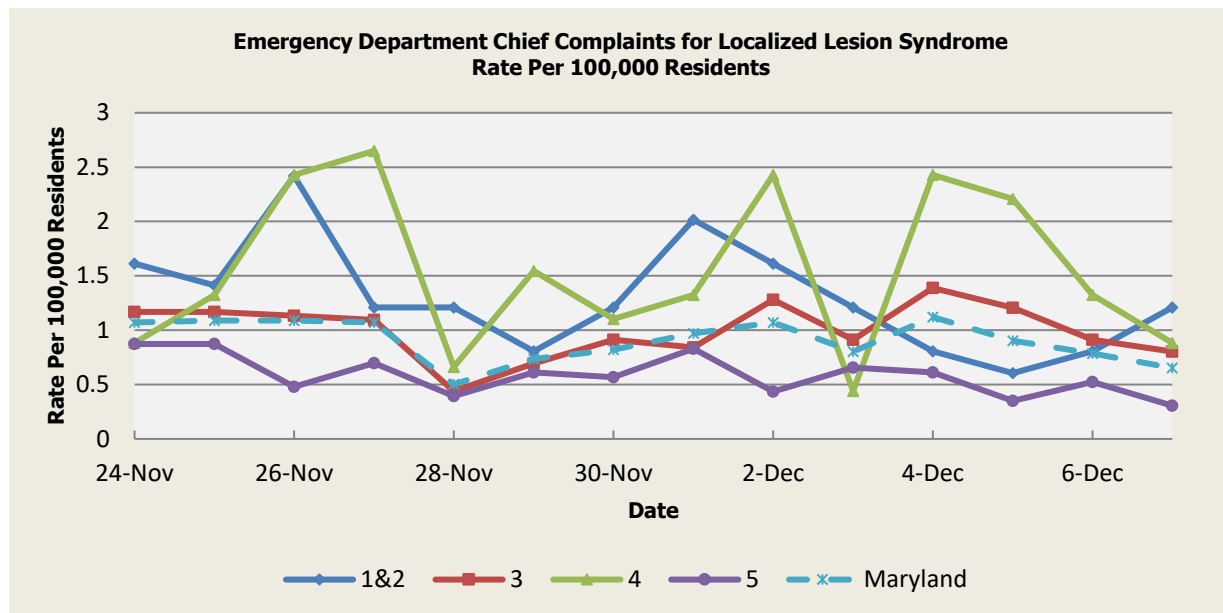
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.08	3.90	4.12	3.04	3.52
Median Rate*	3.02	3.80	3.97	2.92	3.40

*Per 100,000 Residents

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Localized Lesion Syndrome



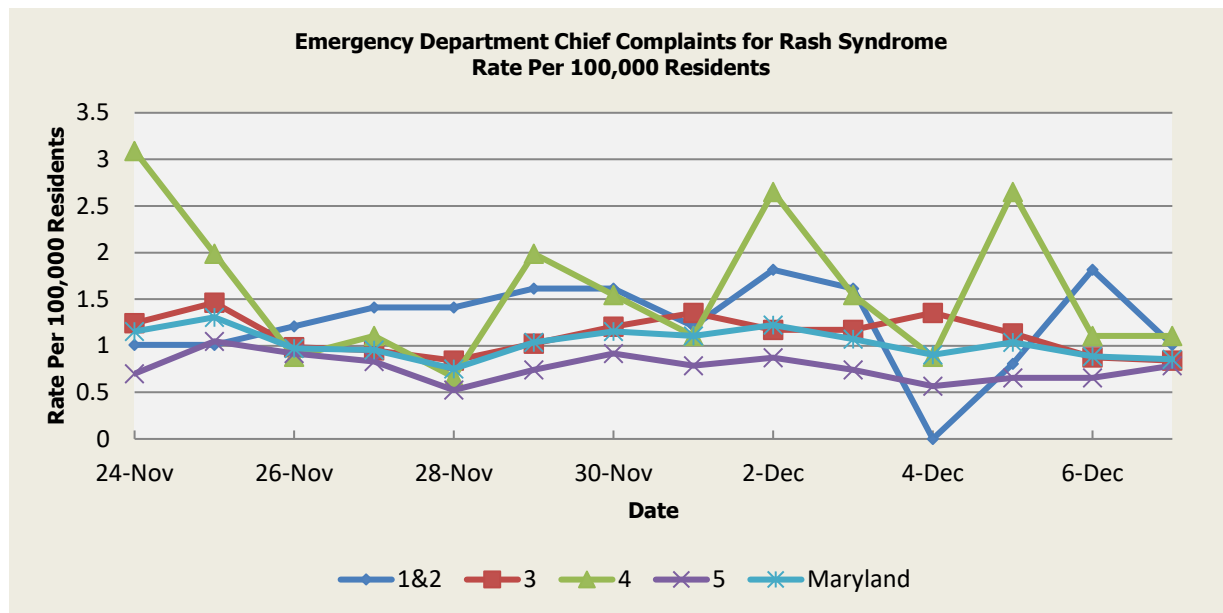
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.17	1.78	2.05	0.91	1.42
Median Rate*	1.01	1.72	1.99	0.87	1.36

* Per 100,000 Residents

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Rash Syndrome



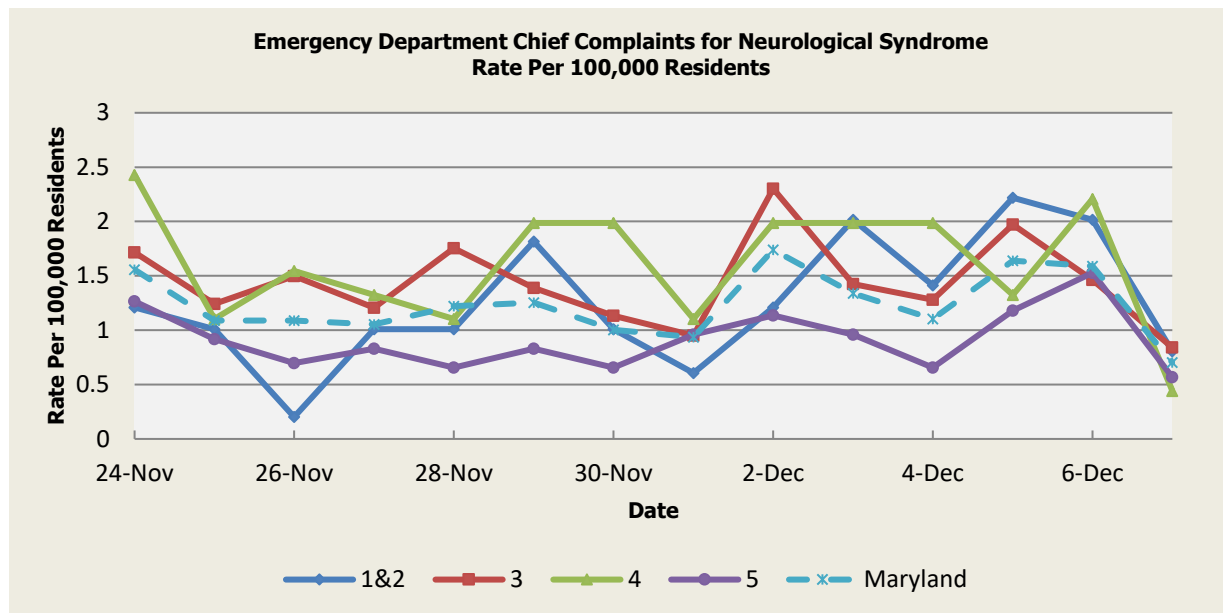
There were no Rash Syndrome outbreak reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.25	1.67	1.76	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.92	1.32

* Per 100,000 Residents

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Neurological Syndrome



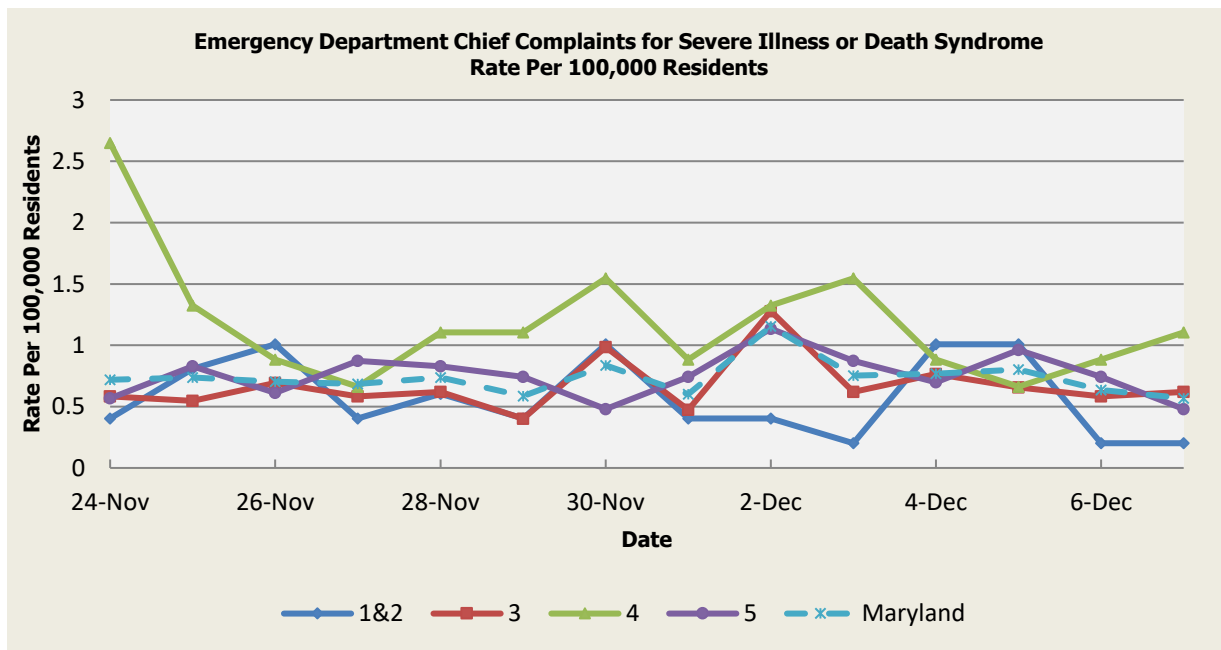
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.79	0.97	0.88	0.61	0.81
Median Rate*	0.81	0.88	0.88	0.57	0.72

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

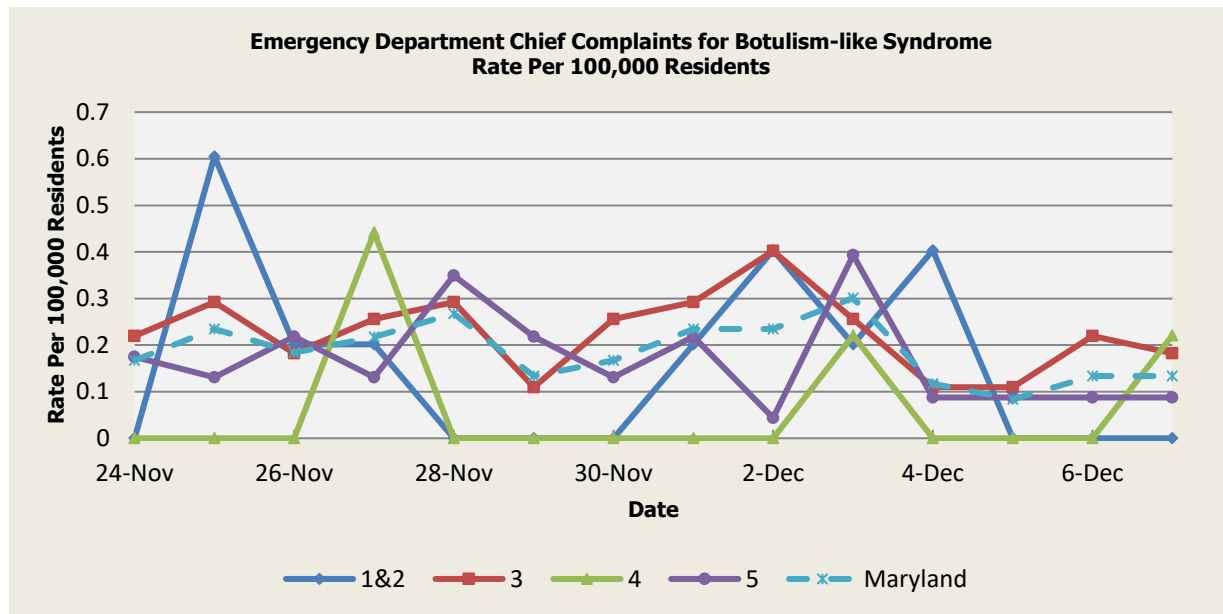
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.89	0.84	0.52	0.73
Median Rate*	0.60	0.84	0.66	0.48	0.70

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



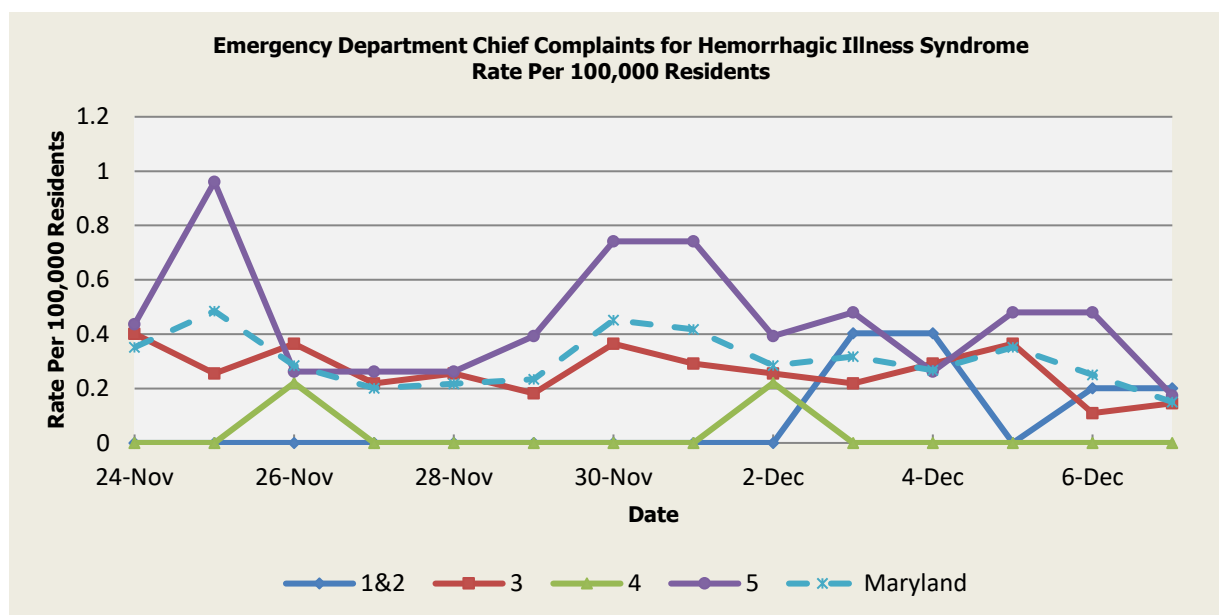
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome, 11/24 (Region 5), 11/25 (Regions 1&2,3), 11/26 (Regions 1&2,5), 11/27 (Regions 1&2,4), 11/28 (Regions 3,5), 11/29 (Region 5), 12/1 (Regions 1&2,3,5), 12/2 (Regions 1&2,3), 12/3 (Regions 1&2,4,5), 12/4 (Region 1&2), 12/7 (Region 4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.08	0.13	0.06	0.08	0.10
Median Rate*	0.00	0.11	0.00	0.04	0.08

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



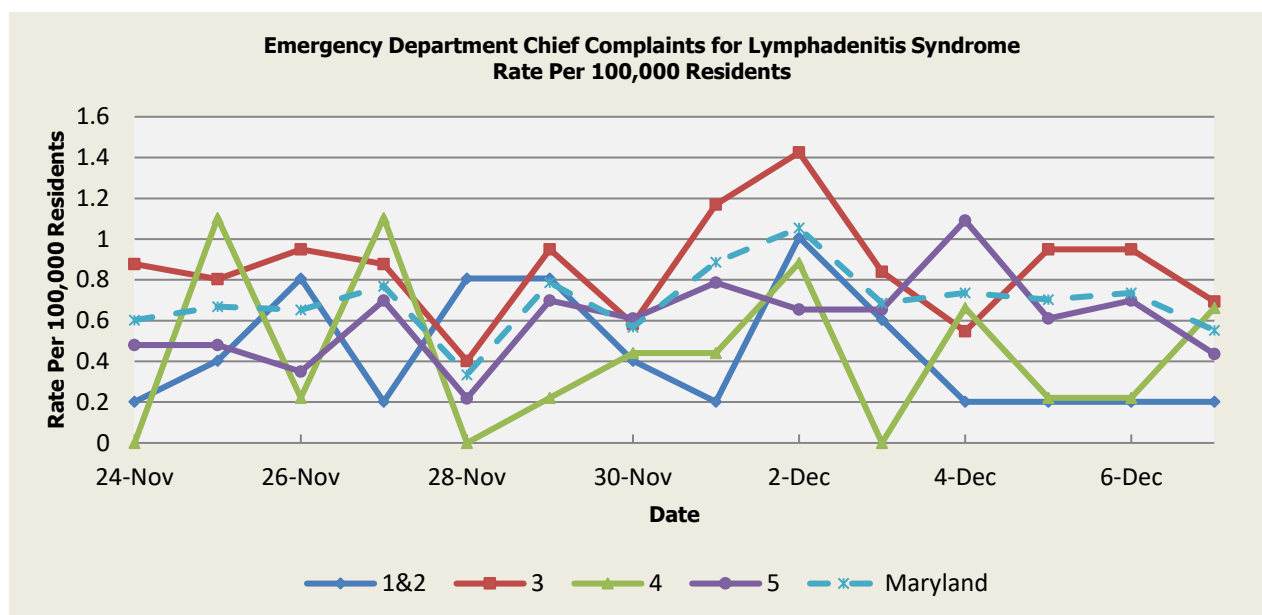
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome, 11/24 (Regions 3, 5), 11/25 (Region 5), 11/26 (Regions 3,4,5), 11/27 (Region 5), 11/28 (Region 5), 11/29 (Region 5), 11/30 (Regions 3,5), 12/1 (Region 5), 12/2 (Regions 4,5), 12/3 (Regions 1&2,5), 12/4 (Regions 1&2,5), 12/5 (Regions 3,5), 12/6 (Regions 1&2,5), 12/7 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.16	0.04	0.13	0.13
Median Rate*	0.00	0.11	0.00	0.09	0.08

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome, 11/25 (Region 4), 11/26 (Region 1&2), 11/27 (Region 4), 11/28 (Region 1&2), 11/29 (Region 1&2), 12/1 (Region 5), 12/2 (Regions 1&2,3,4,5), 12/4 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.39	0.60	0.41	0.39	0.49
Median Rate*	0.40	0.51	0.44	0.35	0.44

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

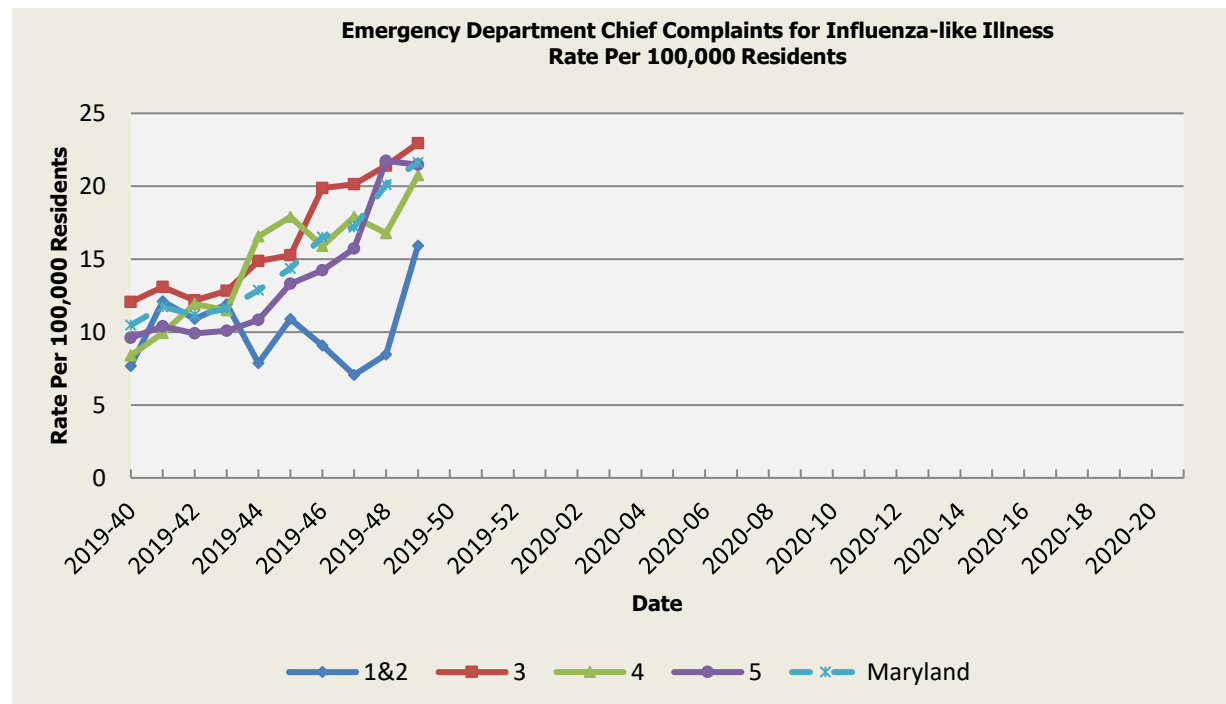
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 49 was: Moderate Activity and Widespread geographic activity.

Influenza-like Illness

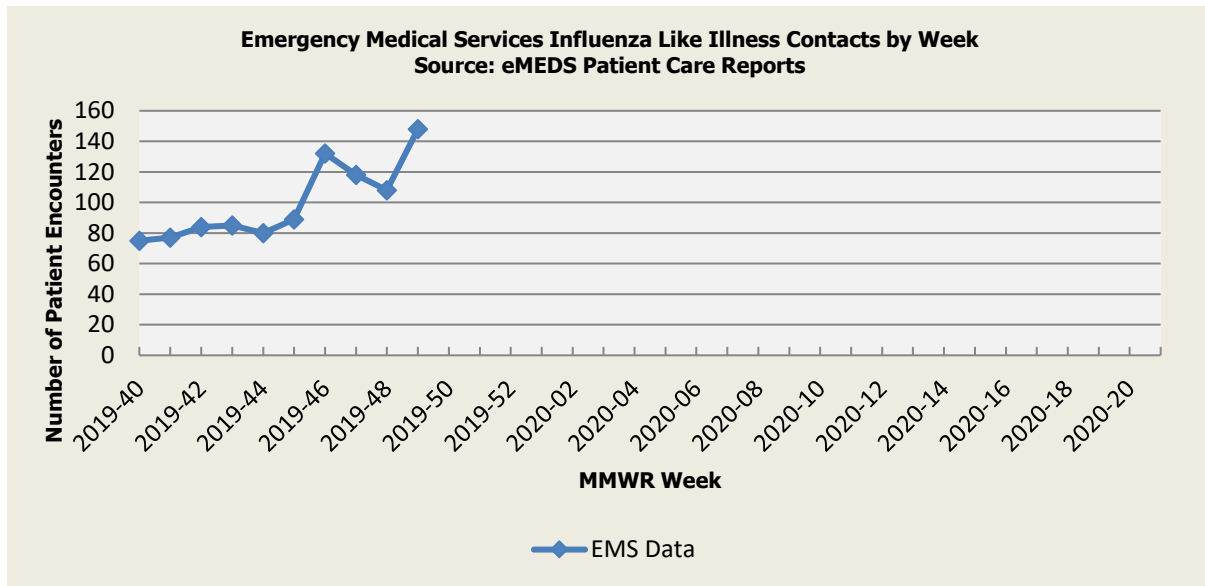


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.13	13.28	12.78	11.25	12.20
Median Rate*	7.66	10.38	9.39	8.82	9.49

* Per 100,000 Residents

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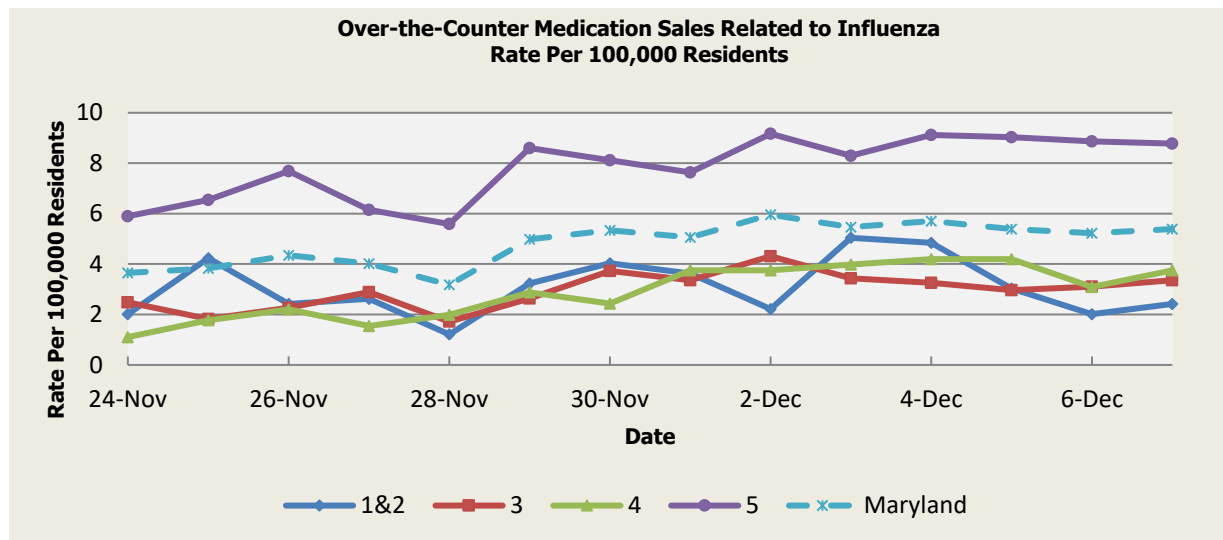
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



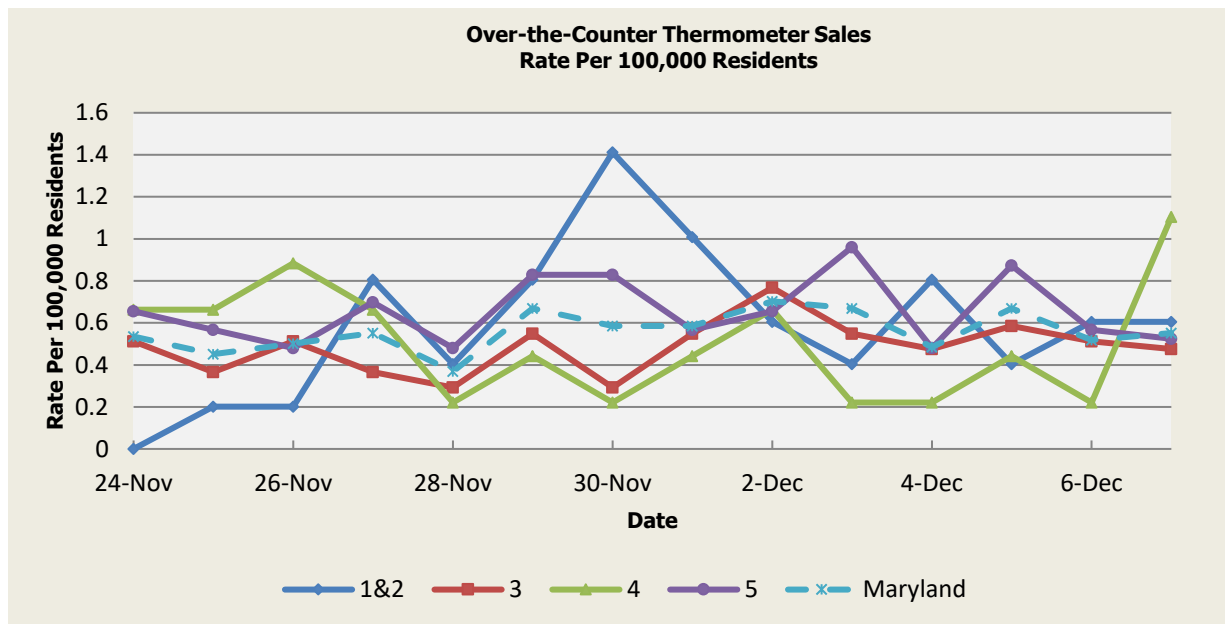
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.44	4.41	2.66	7.76	5.48
Median Rate*	2.82	3.51	2.21	6.99	4.71

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.90	2.76	2.20	3.66	3.07
Median Rate*	2.62	2.67	1.99	3.62	3.03

* Per 100,000 Residents

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SYNDROMIC OVERDOSE SURVEILLANCE

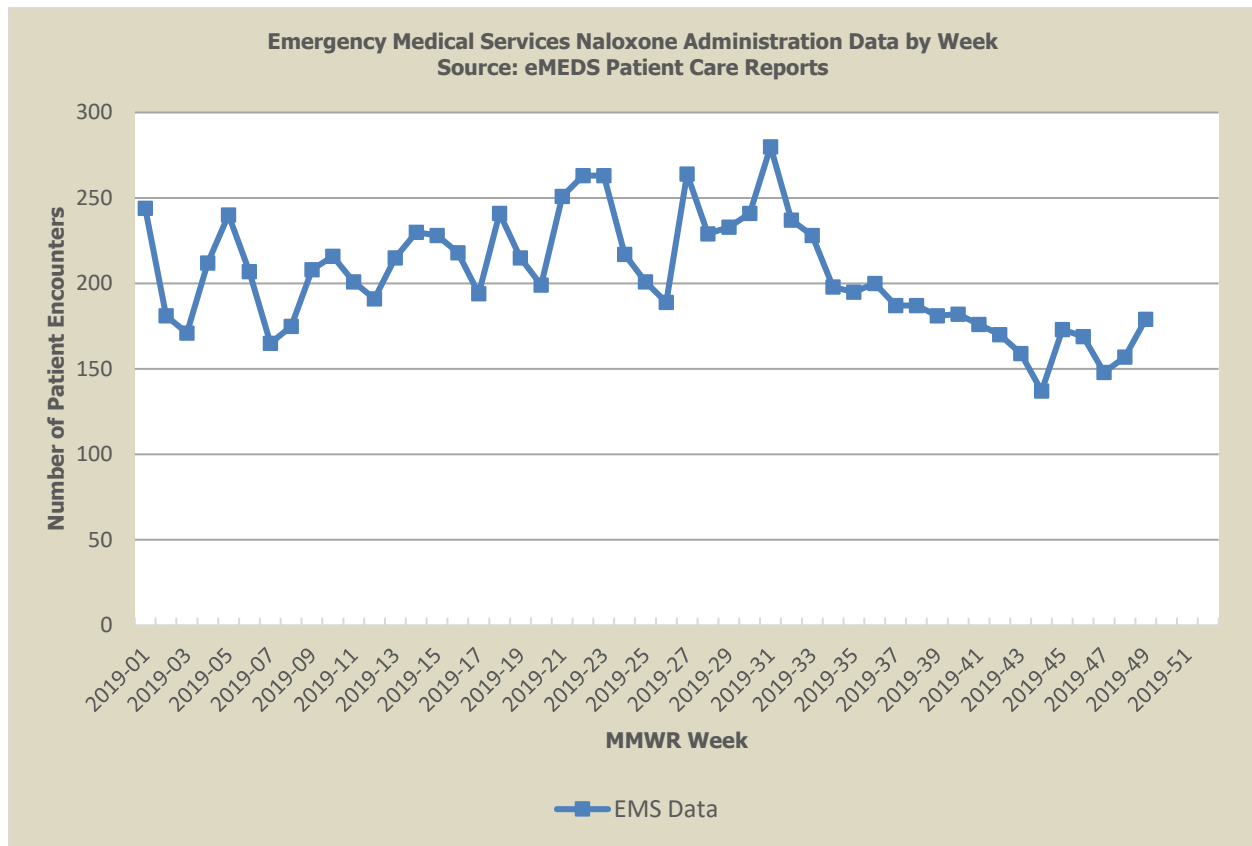
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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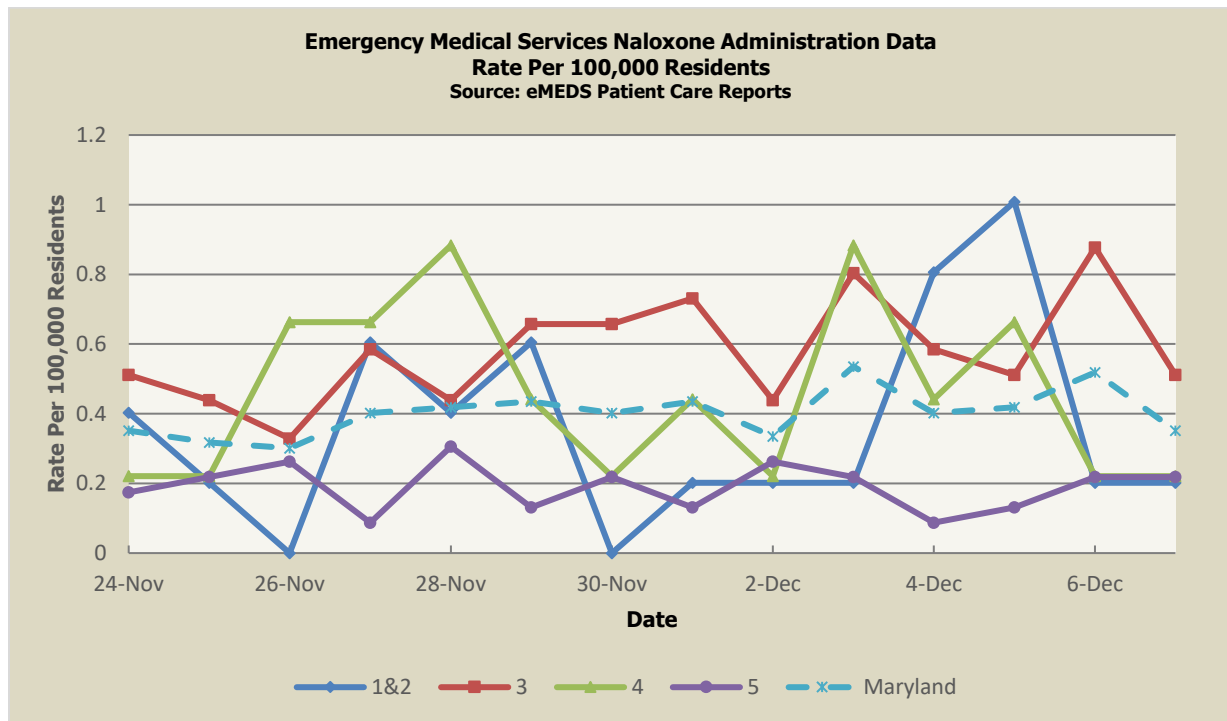
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 12th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

HUMAN AVIAN INFLUENZA

AVIAN INFLUENZA, HUMAN (CHINA), 11 Dec 2019, China reports the 1st 2 human A/H9N2 cases in Fujian and Anhui provinces for the 2019-2020 influenza season. Read More: <https://promedmail.org/promed-post/?id=6834041>

NATIONAL DISEASE REPORTS

LA CROSSE ENCEPHALITIS (OHIO), 11 Dec 2019, Lake County [Ohio] has a confirmed human case of La Crosse encephalitis, a viral disease spread to people by the bite of an infected *Aedes triseriatus* (Eastern tree hole) mosquito. Read More: <https://promedmail.org/promed-post/?id=6833908>

SALMONELLOSIS, SEROTYPE JAVIANA (PENNSYLVANIA), 9 Dec 2019, A total of 31 people have been sickened by salmonellosis at 4 health care facilities in southeastern Pennsylvania. A majority of those cases occurred after individuals ate pre-cut fruit from New Jersey-based Tailor Cut Produce. Read More: <https://promedmail.org/promed-post/?id=6831443>

ADENOVIRUS (WISCONSIN), 9 Dec 2019, Multiple cases of adenovirus has been reported on college campuses around the state, according to health officials. Read More:

<https://promedmail.org/promed-post/?id=6829996>

VAPING-RELATED ILLNESS -TOXIC METALS (MULTISTATE), 6 Dec 2019, Doctors have discovered yet another way vaping -- and vaping THC [the psychoactive compound in marijuana], in particular -- can damage the lungs: when the metal coils of electronic cigarettes heat up to turn e-liquids into aerosols, toxic metals can leach into the liquid, leading to a rare condition usually only seen in industrial metal workers. Read More:

<https://promedmail.org/promed-post/?id=6825898>

HEPATITIS A (MULTISTATE), 6 Dec 2019, The Food and Drug Administration (FDA) has reported that 16 people have now been sickened from a hepatitis A outbreak linked to blackberries. Read More: <https://promedmail.org/promed-post/?id=6824572>

CLOSTRIDIAL MYONECROSIS, WOUND BOTULISM (CALIFORNIA), 6 Dec 2019, A "flesh-eating" bacterium linked to the use of black tar heroin has killed at least 7 San Diego County residents who injected the drug since early October 2019, county health officials said [Wed 4 Dec 2019]. Read More: <https://promedmail.org/promed-post/?id=6824570>

INTERNATIONAL DISEASE REPORTS

MAMMALIAN ORTHOREOVIRUS (BRAZIL), 11 Dec 2019, Diarrhea remains one of the most common causes of death in children. Read More: <https://promedmail.org/promed-post/?id=6832073>

RABIES (ITALY), 10 Dec 2019, A 44-year-old man was admitted to a public hospital (ICU Bisceglie, Barletta-Andria-Trani province, Apulia region, Italy) on 8 Oct 2019 with a suspected rabies infection. Read More: <https://promedmail.org/promed-post/?id=6832827>

POLIOMYELITIS UPDATE (MULTINATIONAL), 11 Dec 2019, Officials in the Ministry of Public Health has said that 2 fresh positive cases of polio have been registered in southern Uruzgan [Oruzgan] and northern Baghlan provinces. Read More: <https://promedmail.org/promed-post/?id=6835536>

E COLI EHEC (MULTINATIONAL), 10 Dec 2019, CDC, public health and regulatory officials in several states, and FDA are investigating a multistate outbreak of Shiga toxin-producing *E. coli* O157:H7 infections. This investigation includes illnesses in Canada recently reported by the Public Health Agency of Canada. Read More: <https://promedmail.org/promed-post/?id=6832965>

PERTUSSIS UPDATE (AUSTRALIA), 10 Dec 2019, Royal Brisbane and Women's Hospital (RBWH) acting director of infectious diseases, Andrew Redmond, said Queensland is

experiencing a spike in whooping cough cases. Read More: <https://promedmail.org/promed-post/?id=6832722>

YELLOW FEVER (MALI), 10 Dec 2019, On 3 Dec 2019, WHO was informed through internal communication of 3 yellow fever cases in Mali, including one death. Read More: <https://promedmail.org/promed-post/?id=6832025>

BRUCELLOSIS (CHINA), 9 Dec 2019, Dozens of researchers in northwestern China's Gansu province have been infected with brucellosis, an animal-borne disease that causes flu-like symptoms and, potentially, lingering problems. Read More: <https://promedmail.org/promed-post/?id=6831365>

SYPHILIS (CANADA), 9 Dec 2019, A syphilis outbreak is worsening in Alberta [Canada], and the majority of new cases are in the Edmonton zone. Read More: <https://promedmail.org/promed-post/?id=6829997>

RIFT VALLEY FEVER (UGANDA), 9 Dec 2019, In late November [2019], Uganda health authorities notified the World Health Organization of a fatal Rift Valley fever (RVF) case from Obongi district. Read More: <https://promedmail.org/promed-post/?id=6829994>

LASSA FEVER (LIBERIA), 7 Dec 2019, A report reaching the Daily Observer from the Nimba County Health Team said that Lassa fever is becoming alarming, with 9 cases confirmed, out of which 3 persons have died. Read More: <https://promedmail.org/promed-post/?id=6828798>

MONKEYPOX (UNITED KINGDOM), 6 Dec 2019, Public Health England (PHE) confirms an individual has been diagnosed with monkeypox [MPX] in England. Read More: <https://promedmail.org/promed-post/?id=6827532>

HEPATITIS E (NAMIBIA), 6 Dec 2019, The Ministry of Health and Social Services and other stakeholders at Gobabis are working around the clock to curb the spread of hepatitis E in the region. Read More: <https://promedmail.org/promed-post/?id=6827202>

CHOLERA, DIARRHEA AND DYSENTERY UPDATE (SOMALIA), 6 Dec 2019, An outbreak of cholera has killed 7 people in Somalia's southwestern region of Bakol, an official confirmed on Wednesday [4 Dec 2019]. Read More: <https://promedmail.org/promed-post/?id=6824571>

MERS-COV (SAUDI ARABIA), 6 Dec 2019, From 1-31 Oct 2019, the National IHR Focal Point of Saudi Arabia reported 15 additional cases of Middle East respiratory syndrome (MERS-CoV) infection and 6 associated deaths. Read More: <https://promedmail.org/promed-post/?id=6827385>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

